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EXAMINER

SONG, HOSUK

ART UNIT PAPER NUMBER

2135

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,115

Applicant(s)

FAHRAEUS ET AL.

Examiner

Hosuk Song

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-15, 17-46 and 48-68 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 16 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4,6-9,11-15,17-46,48-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al.(US 6,367,015) in view of Yoshinobu et al.(US 5,777,605).

Claim 1: Kubo disclose reading at least one pair of coordinates from an encoded base in (fig.25). Kubo disclose checking if the pair of coordinates are within a coordinate area belonging to an authorized user in (col.6,lines 32-35). Kubo disclose granting access by the authorized user to the access protected unit if the coordinates are within the coordinate area belong to the authorized user in (col.10,lines 18-23). Kubo does not specifically disclose reading at least one pair of absolute coordinate. Yoshinobu disclose reading at least one pair of absolute coordinate in (col.6,lines 3-7,10-14). It would have been obvious to person of ordinary skill in the art at the time invention was made to read at least one pair of absolute coordinate as taught in Yoshinobu with coordinate system of Kubo in order to determine greater data accuracy and improve reliability of its system.

Claim 2: Kubo disclose recording pattern from the base with a digital pen; and converting the recorded pattern into a pair of coordinates in (col.11,lines 55-64).

Claim 3: Kubo disclose coordinate area is designated by two pairs of coordinates, the first coordinate pair designating one corner of the coordinate area and the second coordinate pair designating a second corner of the coordinate area, wherein the second coordinate pair lies diagonal to the first coordinate pair in (fig.5A).

Claim 4: Kubo disclose checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs belonging to the authorized user and granting access by the authorized user to the access protected unit, if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs belonging to the authorized user in (fig.10C).

Claim 6: Kubo disclose reading a sequence of coordinate pairs corresponding to the displacement of a digital pen by the user and checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs associated with the access protected unit in (col.12,lines 56-64). Kubo disclose granting access by the authorized user to the access protected unit, if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs associated with the access protected unit in (fig.17).

Claim 7: Kubo disclose checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs associated with a program or function of the access protected unit and activating the program or function of the access protected unit if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs associated with the program or function of the access protected unit in (col.29,lines 48-58;col.30,lines 35-52).

Claim 8: Kubo disclose reading an identification code from a digital pen; checking if the identification code from the digital pen corresponds to an authorized identification code in (fig.14). Kubo disclose granting access by the authorized user to the access protected unit, if the identification code from the digital pen corresponds to the authorized identification code in (fig.14).

Claim 9: Kubo disclose checking if the identification code from the digital pen corresponds to the at least one pair of coordinates from the base in (fig.23).

Claim 11: Kubo disclose a user unit for reading at least one pair of coordinates and a checking device which determines whether the at least one pair of coordinates are associated with at least one coordinate area for authorizing access to the access-protected unit in (col.6,lines 56-60). Kubo disclose

providing an enabling signal to the access protected unit when the checking device determines that access is authorized in (col.fig.22). Kubo does not specifically disclose reading at least one pair of absolute coordinates. Yoshinobu disclose reading at least one pair of absolute coordinate in (col.6,lines 3-7,10-14). It would have been obvious to person of ordinary skill in the art at the time invention was made to read at least one pair of absolute coordinate as taught in Yoshinobu with coordinate system of Kubo in order to determine greater data accuracy and improve reliability of its system.

Claim 12: Kubo disclose optical sensor and image processor in (fig.29).

Claim 13: Kubo disclose base provided with a position coding pattern, wherein user unit is configured to read the position coding pattern from the base and to convert the position coding pattern to the at least one pair of coordinates in (fig.10C).

Claim 14: Kubo disclose user unit is operable to read a sequence of coordinate pairs which describe displacement of the user unit when a user is writing with the user unit in (fig.5a,5b).

Claim 15: Kubo disclose checking device is operable to compare the sequence of coordinate pairs with a stored sequence of coordinate pairs and, on the basis of a favorable comparison, to provide an enabling signal to the access protected unit in (fig.21).

Claim 17: Kubo disclose stored sequence of coordinate pairs represents a function or program within the access protected unit, and the checking device is operable to activate the function or program within the access protected unit based on the favorable comparison in (col.29,lines 48-58;col.30,lines 35-52).

Claim 18: Kubo disclose checking device is integrated with the user unit in (fig.1).

Claim 19: Kubo disclose access protected unit is integrated with the user unit in (fig.1).

Claim 20: Kubo disclose access protected unit is a digital pen in (col.11,lines 52-52-56).

Claim 21: Kubo disclose information about a plurality of coordinate area is stored in the checking device in (fig.5b,10c).

Claim 22: Kubo disclose access protected unit is associated with at least one of plurality of coordinate areas in (fig.10c).

Claim 23: Kubo disclose least one authorized user identity is associated with at least one of plurality of coordinate areas in (col.7,lines 30-35).

Claim 24: Kubo disclose a server unit in communication with the user unit and the access protected unit in (fig.1).

Claim 26: Kubo disclose network access unit in communication with the server unit in (fig.1).

Claim 28: Kubo disclose checking device is integrated with the server unit in (fig.1).

Claim 29: Kubo disclose read an identification code from the user unit in (col.7,lines 31-35).

Claim 30: Kubo disclose memory storing information about at least one coordinate area; a processor operative to receive at least one pair of coordinates in (col.5,lines 23-34). Kubo disclose determine whether at least one pair of coordinates are associated with the stored information for authorizing access to the access protected unit in (col.6,lines 56-60). Kubo disclose enabling signal to the access-protected unit if the processor determines that access is authorized in (col.11,lines 59-64). Kubo does not specifically disclose absolute coordinates. Yoshinobu disclose reading at least one pair of absolute coordinate in (col.6,lines 3-7,10-14). It would have been obvious to person of ordinary skill in the art at the time invention was made to read at least one pair of absolute coordinate as taught in Yoshinobu with coordinate system of Kubo in order to determine greater data accuracy and improve reliability of its system.

Claim 31: Kubo disclose wherein the processor is further operative to check if at least one pair of coordinates are lying within at least one coordinate area for checking the user's authorization in (fig.19B).

Claim 32: Kubo disclose storing a sequence of coordinate pairs and the processor is further operative to receive a sequence of coordinate pairs and check the received sequence of coordinate pairs with the stored sequence of coordinate pairs for checking the user's authorization in (fig.28).

Claim 33: Kubo disclose checking device is integrated with the user unit in (fig.1).

Claim 34: Kubo disclose memory stores information about a plurality of coordinate areas in (fig.5a,5b).

Claim 35: Kubo disclose access protected unit is associated with one of the plurality of coordinate areas in (fig.6a,b).

Claim 36: Kubo disclose program or function is associated with one of the plurality of coordinate areas in (col.29,lines 48-58;col.30,lines 35-52).

Claim 37: Kubo disclose communication interface operably coupled to the processor in (fig.1).

Claim 38: Kubo disclose communication interface operable to communicate with a server unit in (fig.1).

Claim 39: Kubo disclose communications interface is operable to communicate with a user unit in (fig.1).

Claim 41: Kubo disclose communication interface is a hard-wired interface in (fig.1).

Claim 42: Kubo disclose reading an identification code from a digital pen; checking if the identification code from the digital pen corresponds to an authorized identification code in (fig.14). Kubo disclose granting access by the authorized user to the access protected unit, if the identification code from the digital pen corresponds to the authorized identification code in (fig.14).

Claim 43: Kubo disclose reading at least one pair of coordinates from a base and checking if the pair of coordinates are within a coordinate area belong to an authorized user in (col.6,lines 32-35 and fig.25). Kubo disclose grant access by the user to the access protected unit if the identification code from the digital pen corresponds to the authorized identification code in (col.11,lines 55-64). Kubo does not

specifically disclose reading at least one pair of absolute coordinates from a base. Yoshinobu disclose reading at least one pair of absolute coordinate in (col.6,lines 3-7,10-14). It would have been obvious to person of ordinary skill in the art at the time invention was made to read at least one pair of absolute coordinate as taught in Yoshinobu with coordinate system of Kubo in order to determine greater data accuracy and improve reliability of its system.

Claim 44: Kubo disclose recording a pattern from the base with a digital pen; and converting the pattern into a pair of coordinates in (fig.5a,b).

Claim 45: Kubo disclose coordinate is designated by two pairs of coordinates, the first coordinate pair designating one corner of the coordinate area and the second coordinate pair designating a second corner of the coordinate area, wherein the second coordinate pair lies diagonal to the first coordinate pair in (fig.5a)

Claims 46,48: Kubo disclose reading a sequence of coordinate pairs corresponding to a displacement of the digital pen by the user and checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs belong to the authorized user in (col.6,lines 32-35). Kubo disclose granting access by the authorized user to the access protected unit, if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs belonging to the authorized user in (col.6,lines 56-60).

Claim 49: Kubo disclose reading a sequence of coordinate pairs corresponding to the displacement of the digital pen by the user and checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs associated with a program or function of the access protected unit;activating the program or function of the access protected unit if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs associated with the program or function of the access protected unit in (col.29,lines 48-58;col.30,lines 35-52).

Claim 50: Kubo disclose reading an identification code from the digital pen and checking if the identification code from the digital pen corresponds to an authorized identification code in (col.11,lines 52-59;col.12,lines 56-64). Kubo disclose granting access by the authorized user to the access protected unit, if the identification code from the digital pen corresponds to the authorized identification code in (col.11,lines 61-64).

Claim 51: Kubo disclose checking if the identification code from the digital pen corresponds to the at least one pair of coordinates from the base in (col.13,lines 23-33).

Claim 52: Kubo disclose checking if the identification code from the digital pen corresponds to the access protected unit in (col.9,lines 41-48).

Claim 54: Kubo disclose optically reading the at least one pair of coordinates from the base, wherein the base is provided with a position coding pattern for coding a plurality of pairs of coordinate in (col.9,lines 25-32 and fig.10c).

Claim 55: Kubo disclose a plurality of units for reading at least one pair of coordinates and a plurality of bases each of which is provided with a subset belonging to a plurality of subsets of a position coding pattern, wherein each subset codes coordinates within a unique coordinate area in (fig.19a).

Claims 53,56-58: Kubo disclose stored sequence of coordinate pairs corresponds to one of a symbol and a sign in(col.10,lines 12-22).

Claim 59: Kubo disclose a substrate and a writing field associated with the substrate in (fig.29). Kubo disclose a position coding pattern associated with the writing field, wherein the position coding pattern encodes at least one pair of coordinate positions used to grant access authorization in (col.11,lines 52-59;col.12,lines 56-64). Kubo does not specifically disclose absolute coordinate position. Yoshinobu disclose reading at least one pair of absolute coordinate in (col.6,lines 3-7,10-14). It would have been obvious to person of ordinary skill in the art at the time invention was made to read at least one pair of

absolute coordinate as taught in Yoshinobu with coordinate system of Kubo in order to determine greater data accuracy thereby improving data security.

Claim 60: Kubo disclose position coding pattern is read during an unformatted displacement of a user unit over the writing field and wherein the user unit is configured to convert the position coding pattern to the at least one pair of coordinates in (fig. 19A).

Claim 61: Kubo disclose user unit is configured to read a sequence of coordinate pairs describing the displacement of the user unit and further sequence of coordinate pairs are compared to a stored sequence of coordinate pairs for granting access authorization in (fig. 24B).

Claim 62: Neither Kubo or Yoshinobu disclose stored sequence of coordinate pairs represents a user's signature. It would have been obvious to person of ordinary skill in the art to modify the invention of Kubo and Yoshinobu to include user signature in order to improve security because using a signature creates uniqueness of individual where it is difficult for hackers to forge the data.

Claim 63: Kubo disclose substrate is a card in (fig. 4).

Claim 64: Kubo disclose wherein the card is substantially similar to a credit card with respect to size and material in (fig. 4 and col. 1 lines 58-60).

Claim 65: Kubo disclose providing a position coding pattern associated with a writing field coupled to a base wherein the position coding pattern encodes at least one pair of coordinate positions uses to grant access authorization in (col. 2, lines 51-67). Kubo disclose moving a user unit in an unformatted manner in proximity to the writing field and reading the position coding pattern during the moving in (col. 3, lines 1-17; col. 8, lines 1-12). Kubo disclose converting the position coding pattern to the at least one pair of coordinates and granting the access protected unit based upon the at least one pair of coordinates in (col. 11, lines 52-64).

Claim 66: Kubo disclose reading a sequence of coordinate pairs describing the displacement of the user unit and comparing the sequence of coordinate pairs are to be stored sequence of coordinating pairs for granting access authorization in (fig.24B).

Claim 67: Neither Kubo or Yoshinobu disclose stored sequence of coordinate pairs represents a user's signature. It would have been obvious to person of ordinary skill in the art to modify the invention of Kubo and Yoshinobu to include user signature in order to improve security because using a signature creates uniqueness of individual where it is difficult for hackers to forge the data.

Claim 68: Kubo disclose base is a card in (fig.4).

Claims 25,27,40: Neither Kubo or Yoshinobu specifically disclose a wireless communication unit in communication with a network access unit in communication with the server unit. Official notice is taken that wireless communication unit in communication with a network access unit in communication with the server unit is well known in the art. One of ordinary skill in the art would have been motivated to employ wireless capability in order to conduct data transfers without bound to a fixed location thus offering the user with convenient way to conduct transaction without wires.

Allowable Subject Matter

2. Claims 5,10,16,47 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Applicant's arguments

3. Claims 1-68 are pending. Applicant's amendment to the claims 11,30,43 and newly added claims 59-68 necessitated new grounds of rejection. New grounds of rejections are presented above. Applicant traverse the Official Notice and request that the Examiner either provide a competent prior art reference supporting the rejection, an affidavit in support of the Examiner's assertion, or withdraw the rejection of

the claims. In response: Applicant has not provided any substantial information, evidence or argument challenging the taking of Official Notice in the rejection of the claims. See MPEP 2144.03.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

USPTO Contact information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 571-272-3857. The examiner can normally be reached on Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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